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How analyzing the interictal EEG can identify the epilepsy

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Abstract

© 2015, Education and Upbringing Publishing. All rights reserved. Here we demonstrate a capability of a method based on the Flicker-Noise Spectroscopy (FNS) in analyzing the epilepsy manifestation in interictal EEG. Generally the seizure free EEG from epileptic patient does not show visual differences from healthy EEG. Analyzing the behavior of FNS-parameters and the structure of 3D-cross correlators allows to discover the differential characteristics of epilepsy. The cerebral cortex electric activity of epilepsy patients have a specific collective dynamics and configuration of FNS-characteristics in comparison with healthy subjects.

Keywords

Flicker-noise spectroscopy, Interictal EEG, Synchronization effects, Time series analysis